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LAW OFFICES OF TOWNSEND & BANTA  
Suite 500  
1225 Eye Street, N.W.  
Washington, DC 20005

EXAMINER

YOON, TAE H

ART UNIT PAPER NUMBER

1714

DATE MAILED: 02/05/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/28/571

Applicant(s)

Ishihara et al

Examiner

T. Yoon

Group Art Unit

1714

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

☒ Responsive to communication(s) filed on 12-27-02

☒ This action is **FINAL**.

- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-7 and 9-19 is/are pending in the application.
- ☐ Of the above claim(s) is/are withdrawn from consideration.
- ☐ Claim(s) is/are allowed.
- ☒ Claim(s) 1-7 and 9-19 is/are rejected.
- ☐ Claim(s) is/are objected to.
- ☐ Claim(s) are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☒ All ☐ Some\* ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 1714

The following is a quotation of the first paragraph of 35 U.S.C. 112:G

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 11 and 14-16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The recited use of combination of melamine resin, isocyanate and blocked isocyanate in claim 11 has no support and thus is New Matter. Also, the recited “---blcks pigment exhibits a reflectance of between 8.0% and 15.0% relative to a solar radiation in the 780-2,100 nm wavelength region” in claim 14 (and 15, 16) has no support and thus is New Matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10, 11, 13 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A proper Markush language is “---selected from the group consisting of A, B, C, --- and Z”, and thus claims 10 11 and 13 are indefinie. The claim 11 is unclear whether the curing agent

Art Unit: 1714

consists of melamine resin, isocyanate and blocked isocyanate combined or each. In claim 13, the recitation of formulae in a proper format is needed. For example,  $\text{Cr}_2\text{O}_3$  should be  $\text{Cr}_2\text{O}_3$ .

The recited Trademark SOLVESSO in claim 19 is indefinite. The use of trademarks and tradenames in the claims is improper because the manufacturer is under no obligation to continue making the same material under a given trademark nor to continue selling anything under a given trademark. The discontinued use of the trademark or the changing of the material sold under the trademark renders the claim meaningless. See MPEP 608.01(v).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 4-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yamada et al (US 5,540,998).

Art Unit: 1714

Yamada et al teach a solar heat-shielding coating exhibiting achromatic black with 24-34 % solar radiation reflectance in table 1. Yamada et al also teach a high solar heat radiation reflectance in the instant range of wavelengths at col. 3, line 49 to col. 4, line 9 which meets the instant invention. Coating compositions on cols. 7 and 8 show an acrylic resin, xylene, methyl isobutyl ketone and hexamethylene diisocyanate crosslinker. Thus, the instant invention lacks novelty.

Claims 1-7, 9-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piana (US 5,739,204) in view of Ravinovitch et al (US 4,424,292) or Modly (US 4,624,710).

Rejection is maintained for reason of record and following.

Piana teaches coated metals and that said coating has high resistance to weathering (col. 2, lines 30-35). Therefore, the utilization of black pigments comprising  $\text{Cr}_2\text{O}_3$  and  $\text{Fe}_2\text{O}_3$  of Ravinovitch et al or Modly which are well known their weather resistance is a *prima facie* obviousness. Solvents of the instant claim 19 are taught at col. 5, lines 12-22.

Applicant asserts that the examiner failed to provide a basis for the inherent characteristics of the black infrared reflecting pigment of Ravinovitch et al and Modly, but the examiner disagrees with said assertion since no further explanation is needed for one skilled in the art. However, the examiner provides following; First, discovery that claimed composition possesses properties not disclosed in the prior art does not alone defeat prima facie case. *In re Dillon*, 16

Art Unit: 1714

USPQ 2d, 1897 (CAFC 1990). Second, the examiner takes a position of Judicial Notice of above Yamada et al (US 5,540,998) who teach the art well known inherent properties for black pigmented coatings for a solar heat- (or light-) shielding coating. Third, for example, Modly teaches a black pigment comprising 48.8 wt% of  $\text{Cr}_2\text{O}_3$  and 17.6 wt% of  $\text{Fe}_2\text{O}_3$  in example I which meets the instant composition, and thus inherently possesses the instantly recited properties. Ravinovitch et al also teach a black infrared reflecting pigment of  $\text{Cr}_2\text{O}_3$  and  $\text{Fe}_2\text{O}_3$  (Ferro O-1316 Black) at col. 4, lines 17-27. Applicant failed to show otherwise.

Black Pigments A-H on page 12 of the specification show various solar radiation reflectances, 1-54%, however, the non-inventive pigments E-H having a reflectance of below 8% have little probative value and failed to overcome the rejection since they do not contain a mixture of  $\text{Cr}_2\text{O}_3$  and  $\text{Fe}_2\text{O}_3$  taught by Ravinovitch et al and Modly. Also, a comparison must be based on the closest prior art, and not on applicant's own choice.

Claims 9-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neil (US 6,207,224) in view of Ravinovitch et al (US 4,424,292) or Modly (US 4,624,710).

Rejection is maintained for reason of record and above.

Claims 9, 10 and 14-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nakamura et al (US 5,814,434).

Rejection is maintained for reason of record and above.

Art Unit: 1714

The intended use on a metal substrate or various exteriors has no probative value. The applicant's argument is directed towards the intended use of the instantly claimed composition. The instant claims are directed towards a composition, not its intended use. The composition is defined solely by its ingredients and the amounts thereof. The instant recitation of the intended use of the composition does nothing to further define the composition to one of ordinary skill in the art. The US Patent and Trademark Office cannot patent claims directed towards a composition which is not novel or is obvious only because the inventor has found a novel use for the composition. See *In re Pearson*, 494 F. 2d 1399, 181 USPQ 641 (CCPA 1974).

Nakamura et al teach a calcined black pigment comprising oxides of chromium, iron and manganese at col. 5, line 2 and in Synthesis Example 4 on col. 13. Said Synthesis Example 4 refers to Synthesis Example 1 wherein a higher amount of iron oxide and a similar amount of other oxides are used. Thus, the instantly claimed amount of claims 17 and 18 is at least a *prima facie* obviousness. Also, the broad teaching of oxides from chromium, iron and manganese encompasses the instant amount which is an anticipation.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 1714

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Monday to Thursday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

THY/January 30, 2003



AE H. YOON  
JANUARY 30, 2003